

Claims

1. A skew shape variable laminated iron core in which plural iron core pieces are laminated through caulking projections and caulking holes in which the caulking
5 projections are fitted,

characterized in that in the iron core pieces except a lowermost layer, the caulking projections and the caulking holes are respectively formed at different positions of a same radius from a rotation center at skewing of the iron core pieces, and the caulking hole is longer in a circumferential direction than the caulking projection fitted in the caulking hole,
10 and when the caulking projection of the iron core piece of an upper layer is fitted in the caulking hole of the iron core piece, a gap is formed in the circumferential direction of each of the caulking holes.

2. The skew shape variable laminated iron core as recited in claim 1, characterized in that the caulking hole has an arc shape when viewed from the rotation
15 center at the skewing.

3. The skew shape variable laminated iron core as recited in claim 1 or 2, characterized in that the caulking hole is formed to pass through the plural laminated iron core pieces, and the caulking projection fitted in the caulking hole formed to pass through reaches to a lower part position of the caulking hole formed to pass through.

20 4. The skew shape variable laminated iron core as recited in claim 1 or 2, characterized in that

the caulking holes include a first caulking hole formed in every second iron core piece of the iron core pieces in a lamination direction, and a second caulking hole formed at a position different from the first caulking hole and to pass through the plural laminated
25 iron core pieces, and

the caulking projections include a first caulking projection reaching to a lower part position of the first caulking hole, and a second caulking projection reaching to a lower part position of the second caulking hole.

5. A manufacturing method of a skew shape variable laminated iron core,
30 comprising:

a step of forming a caulking hole in a lowermost layer iron core piece, and

forming caulking projections and caulking holes respectively in iron core pieces except the lowermost layer at a same radius position from a rotation center at skewing and at different positions, and

5 a step of forming a laminated iron core by fitting the caulking projection of the iron core piece of an upper layer into the caulking hole of the iron core piece of a lower layer,

10 characterized in that the caulking hole is formed to be longer than the caulking projection in a direction of a circumference with the rotation axis as a center, and when the caulking projection of the iron core piece of the upper layer is fitted into the caulking hole of the iron core piece of the lower layer, a gap is formed between the caulking hole and the caulking projection and in the circumferential direction.